

SEQUENCE LISTING

<110>	Orlando, Joseph S. Ornelles, David A.	
<120>	Adenovirus E4 Protein Variants for Virus Production	
<130>	9151-16	
	US 09/895,940 2001-06-29	
<160>	34	
<170>	PatentIn version 3.2	
<220>		
<400>	1 tgtg ccgaggagac aaggcgcct	29
cgccgc	agag cagaggagaa aaggagaaa	
<210>	2	
<211> <212>		
	Artificial sequence	
<220>		
<223>	Synthetic oligonucleotide	
<400>	2 atgc tggaggcggt ggaaatcatc gctga	35
cgcccc	acge eggaggegge ggaaaceae geega	
<210>		
<211>		
<212>		
<213>	Artificial sequence	
<220> <223>	Synthetic oligonucleotide	
<400>	3	
gcccgg	agga cagaggagct tatgctgcgg	30
<210>	4	
<211> <212>	27 DNA	
<212> <213>		
000		
<220> <223>	Synthetic oligonucleotide	
<400>	4	

gcccgga	agga cagagegeet tatgetg	27
<210>	5	
<211>	27	
<212>		
<213>	Artificial sequence	
<220>		
<223>	Synthetic oligonucleotide	
<400>	5	
	acaa gggagcttat gctgcgg	27
cggugge	acaa gggageeaa geegegg	
<210>	6	
<211>	30	
<212>		
<213>	Artificial sequence	
<220>		
<223>	Synthetic oligonucleotide	
<400>	6	
gcaacgg	gcag cgctcatgct agcagcggtg	30
<210>	7	
<211>		
<212>		
<213>	Artificial sequence	
<220>		
<223>	Synthetic oligonucleotide	
<400>	7	
caccgct	tgct agcatgagcg ctgccgttgc	30
<210>	8	
<211>	30	
<212>	DNA	
<213>	Artificial sequence	
<220>		
<223>	Synthetic oligonucleotide	
<223>	Synthetic Oligonacieotide	
<400>	8	
aagacca	aaga agcttatgct gaaggcagta	30
J		
<210>	9	
<211>		
<212>		
<213>	Artificial sequence	
<220>		
<223>	Synthetic oligonucleotide	
.223/	2,1000000 011300000000	
<400>	9	
tactgc	cttc agcataagct tcttggtctt	30

<210>	10	
<211>	30	
<212>	DNA	
<213>	Artificial sequence	
<220>		
<223>	Synthetic oligonucleotide	
	3	
<400>	10	
	ctgc tgcgcagaga ggacaaggcg	30
33-3-3		
<210>	11	
<211>	31	
<212>		
	Artificial sequence	
\Z1J/	Arctificial bequence	
<220>		
	Synthetic oligonucleotide	
\225/	Dynametro orradinational	
<400>	11	
	gtgc ccgggagaca aggcgcctta t	31
getget	gege eegggagaea aggegeeeta t	7-
<210>	12	
<211>		
<212>		
	Artificial Sequence	
(213)	Artificial bequence	
<220>		
	Synthetic oligonucleotide	
\2237	Synthetic Oligonaciociae	
<400>	12	
	ttat getegaggeg gtgegaate	29
ggcgcc	cut georgaggeg gegegaate	
<210>	13	
<211>		
<212>		
	Artificial sequence	
(213)	Artificial sequence	
<220>		
	Synthetic oligonucleotide	
(223)	Synthetic Oligonacieotide	
<400>	13	
	ggcg gtcgaaatca tcgctgagg	29
geegeg	ggog geogadaeea eegeogagg	
<210>	14	
<211>		
<211>		
<413>	Artificial sequence	
<220>	·	
	Cumthotic oliconyalootido	
<223>	Synthetic oligonucleotide	
<400>	14	
	tetge tgtgeagetg egacaaggeg cettatg	37
99 C9 C9		- ,

• .

	•			
<210>	> 15			
<211>				
•	DNA			
<213>	> Artificial sequence			
<220>				
<223>	> Synthetic oligonucleotide			
<400>	> 15			
gcccg	ggagga cagetgeeet tatgetgegg			30
0.0				
<210>				
<211>	> 41 > DNA			
	> DNA > Artificial sequence			
<2132	Artificial sequence			
<220>				
<223>	> Synthetic oligonucleotide			
<400>	> 16			
ggcgc	ccttat gctggcagct gtggcaatca	tcgctgagga g		41
<210>	> 17			
<211:	> 34			
<212	> DNA			
<213>	> Artificial sequence			
<220:	>			
	> Synthetic oligonucleotide			
<400>	. 17			
	tgctgt gccgcgcgca caaggcgcct	tato		34
90900	egeege geegegegea caaggegee	July		.
.210.	10			
<210				
<211:				
	> DNA > Artificial Sequence			
(213)	Artificial Sequence			
<220				
<223	> Synthetic oligonucleotide			
<400	> 18		·	
gctgo	egggeg gtegegatta tegetgagga	gacc		34
<210:	> 19			
	> 24			
<212	> DNA			
<213	> Artificial sequence			
<220	>			
	<pre>> Synthetic oligonucleotide</pre>	•		
<400				
cccgg	gaggac agcgcgcctt atgc			24
•	•			,

•

<210>	20	
<211>	24	
<212>		
<213>	Artificial sequence	
<220>		
<223>	Synthetic oligonucleotide	
<400>	20	
cgcgcac	caag agctettatg etge	24
<210>	21	
<211>	28	
<212>		
<213>	Artificial sequence	
-220		
<220>		
<223>	Synthetic oligonucleotide	
.400.	21	
<400>		
ccttate	getg geggeegteg egattate	28
<210>	22	
<211>	31	
<212>		
<213>	Artificial sequence	
<220>		
<223>	Synthetic oligonucleotide	
<400>	22	
ctgctgt	tgcc cgggcgacaa ggcgccttat g	31
<210>	23	
<211>	30	
<212>		
<213>	Artificial sequence	
	·	
<220>		
<223>	Synthetic oligonucleotide	
<400>	23	
		2.0
ccggagg	gaca agggeeetta tgetgeggge	30
010	24	
<210>	24	
<211>	33	
<212>	DNA	
<213>	Artificial sequence	
<220>		
	Complete alimental action	
<223>	Synthetic oligonucleotide	
<400>	24	
		22
ggcgcct	ttat getggeggee gtgegaatea teg	33
-210-	. ·	
<210>	45	

```
<211> 29
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 25
                                                                     29
gagetettat getageggeg gtegegatt
<210> 26
<211> 17
<212> PRT
<213> Human adenovirus type 2
<400> 26
Ala Arg Arg Thr Arg Arg Leu Met Leu Arg Ala Val Arg Ile Ile Ala
               5
                                   10
Glu
<210> 27
<211> 17
<212> PRT
<213> Artificial sequence
<220>
<223> R4K mutant Ad E4orf6 amino acids 239-255
<400> 27
Ala Arg Lys Thr Lys Lys Leu Met Leu Lys Ala Val Arg Ile Ile Ala
               5
                                   10
Glu
<210> 28
<211> 17
<212> PRT
<213> Human adenovirus type 9
<400> 28
Ala Arg Arg Thr Arg Arg Leu Met Leu Lys Ala Val Gly Ile Ile Ala
               5
                                   10
Arg
<210> 29
```

<211> 17

<212> PRT <213> Human adenovirus type 17 <400> 29 Ala Arg Arg Thr Arg Arg Leu Met Leu Arg Ala Val Gly Ile Ile Ala Arg <210> 30 <211> 17 <212> PRT <213> Human adenovirus type 12 <400> 30 Ala Arg Arg Thr Arg Leu Leu Met Leu Lys Val Val Gln Val Ile Ala 5 10 Glu <210> 31 <211> 17 <212> PRT <213> Human adenovirus type 40 <400> 31 Ala Arg Arg Thr Arg Arg Leu Leu Ala Lys Ala Val Lys Val Leu Gly 5 Ser <210> 32 <211> 17 <212> PRT <213> Porcine adenovirus 3 <400> 32 Ala Gln Arg Leu Arg His Trp Leu Lys Leu Ala Ala Glu Ala Ile Gly 10 Ala <210> 33 <211> 17

<212> PRT

<213> Bovine adenovirus type 3

<400> 33

Leu Lys Arg Cys Lys Gln Lys Ile Arg Tyr Met Leu Asn Leu Ala Pro 10

Lys

<210> 34

<211> 16

<212> PRT <213> Canine adenovirus type 1

<400> 34

Ala Phe Trp Val Arg Ser Ile Ile Asp Arg Val Leu Arg Glu Val Glu 10